

Prevalence of malnutrition among children under 12 years with congenital heart disease, admitted to the cardiology unit at a tertiary care setting in Sri Lanka

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Introduction

It is estimated that around 3255 children are born with congenital heart disease (CHD) per year in Sri Lanka and half of them will require surgery within the first few years of life. In this group of children malnutrition affects the body as a whole compromising cardio-pulmonary functions, healing capacity and immunological competency leading to high morbidity and mortality. Therefore, the objective of this study was to determine the prevalence of malnutrition among children with congenital heart disease awaiting cardiac interventions in a tertiary care cardiology unit.

Method

All patients below 12 years, admitted to the cardiology unit at Lady Ridgeway hospital for children during the month of August 2017 were recruited. As recommended by American society for Parenteral and Enteral Nutrition (ASPEN), Z scores were used for the assessment of nutritional status. In children below 5 years, weight / height below -3SD and between -3SD and -2SD were taken as severe acute malnutrition (SAM) and moderate acute malnutrition (MAM) respectively. In children above 5 years, the sex specific BMI below -2SD was considered as acute malnutrition. Height / Age below -2SD was taken as stunted and below -3SD was taken as severely stunted.

Results

Total of 102 children were included (Infants 43, 1 - 5 years 24, >5 years 33). Male population was 49.4% and 50.6% were females. Low birth weight was seen in 30.7%. Prevalence of SAM was 24.5% and 84% of them were infants. MAM was seen in 25.4% of which 61.5% were below 5 years. Stunting below 5 years was 48.4% of which 62.5% were severely stunted. In above 5 years, 36.3% were stunted of which 25% were severely stunted.

Conclusion

Half of the children with CHD admitted to the cardiology unit in this study sample were malnourished. Majority of them were below 5 years. Therefore, nutritional interventions and further studies of this at-risk group are needed for a better outcome of them.

Key Words: Congenital heart disease, Malnutrition, Sri Lanka